Solution 4.1

a) Dividend income may be recognised by the persons holding the shares (i.e. the shareholders) on 31st December, being the date on which the right to receive the dividend is firmly established.

b) Since value-added tax is an amount received on behalf of a third party (the relevant tax authority) the economic benefit does not flow to the entity receiving it. The value-added tax should therefore be shown as a liability (a present obligation expected to result in an outflow of economic benefits).

c) According to IAS 18, revenue should be recognised at fair value of the consideration received/ receivable, where 'fair value' is calculated by deducting the amount of any trade discount given. (It is interesting to note that the same principles should be applied when purchasing goods and receiving trade discount: the cost of purchases should be recorded net of trade discount received).

d) Entities granting cash discounts to customers should reduce the amount of revenue recognised on the date of sale.

e) Settlement discounts allowed have to be estimated at the date of sale and the amount of the revenue reduced accordingly. This is consistent with the requirement of IAS 18 that revenue should be recognised at the fair value of the consideration receivable (IAS 18, paragraph 9).

f) A sale of goods on an instalment-sale basis includes a financing perspective. On completion of the necessary documentation, the customer is able to take the purchased goods into his custody. The payment for these goods occurs over a period of time and the total of the instalments add up to an amount in excess of the normal cash sale price. The reason for this excess is the financing cost that the customer is expected to pay. The revenue that may be recognised on the date of the sale is the cash sale price. The balance is recognised as interest income on a time basis, using the effective interest rate method.

g) The revenue from sale of goods should only be recognised when 'the significant risks and rewards of ownership' have been transferred from the seller to the buyer and therefore the risks and rewards are generally assumed to be transferred on delivery of the goods.

However assuming that the goods had been sent before year-end, but only arrived after year-end, whether or not the sale was made on a FOB or CIF basis would then become relevant. If the goods were transported to the buyer on a F.O.B. basis (free-on-board), as the goods are packed on board the ship, they become the property of the buyer. If the goods are shipped C.I.F. (customs, insurance and freight), the seller undertakes to ensure that the goods arrive intact. The question did not specify which method was adopted, so the assumption must be that the goods were shipped C.I.F. and that the risks and rewards are only transferred on the date of delivery. Therefore, no revenue should be recognised until after year-end.

Solution 4.1 continued…

h) In a lay-by sale (otherwise known as a lay-away sale), the goods are retained in the possession of the seller until such time as the last payment is made by the buyer It differs from an instalment sale in that there is no financing aspect included in this transaction and the customer is not legally obliged to purchase the goods. Therefore, revenue is generally recognised after the final payment is received and the relevant goods are on hand and ready to be delivered. However, if *past experience indicates* that most lay-by sales are successfully concluded, then the revenue may be recognised once a significant portion of the sales amount has been received by the seller.

i) A bill and hold sale involves a customer purchasing an item that is to be delivered or collected some time in the future. The revenue from such a sale may only be recognised when the customer has been invoiced, the goods are ready for delivery and it is probable that the delivery will take place.

j) This is a normal sale (not a bill and hold) since the delay was not requested by the customer. The sale may therefore be recognised only once the goods are delivered, (on 3rd March), being the date upon which the risks and rewards are transferred and managerial control and effective management ceases.

k) Revenue from a sale that has 'gone bad' should still be shown as revenue on the date that the sale took place, with the amount considered unrecoverable shown separately as an expense (bad debt expense).

Solution 4.2

		Debit	Credit
Mr. Schumi: Cash discount			
2 January 20X7			
Bank	*200 000 x 90%*	180 000	
Sales income			180 000
Cash sale to Schumi (less 10% cash discount)			
Mr. Frank: Trade discount and cash discount			
1 February 20X7			
Bank	*100 000 x 3 x 90% x 90%*	243 000	
Sales income			243 000
Cash sale to Frank (less 10% trade and 10% cash discount)			
Mr. Alonzi: Settlement discount			
1 March 20X7			
Accounts receivable	*Given*	150 000	
Finance income allowance	*150 000 x 5%*		7 500
Sales income	*150 000 x 95%*		142 500
Credit sale to Alonzi (less 5% early settlement discount)			
30 March 20X7			
Bank	*150 000 x 95%*	142 500	
Accounts receivable			150 000
Finance income allowance		7 500	
Receipt from Alonzi within settlement period			
Ms Haki: Sale on normal credit terms *			
1 April 20X7			
Accounts receivable	*Given*	400 000	
Sales income			400 000
Credit sale to Haki			
31 May 20X7			
Bank	*Given*	400 000	
Accounts receivable			400 000
Receipt from Haki			
Mr. Rory: Rebate against expenses *			
1 May 20X7			
Accounts receivable	*10 x 100 000 x 90%*	900 000	
Sales income	*10 x 100 000 x 100%*		1 000 000
Rebate expense	*10 x 100 000 x 10%*	100 000	
Credit sale to Rory less 10% rebate against customer selling costs			
30 June 20X7			
Bank		900 000	
Accounts receivable			900 000
Receipt from Rory			

Solution 4.2 continued …

		Debit	Credit
Mr. Burn: Rebate against selling price *			
1 June 20X7			
Accounts receivable	*10 x 100 000 x 90%*	900 000	
Sales income			900 000
Credit sale to Burn less 10% rebate against selling price			
31 July 20X7			
Bank		900 000	
Accounts receivable			900 000
Receipt from Burn			
Mr. Mechanic: Sale on extended credit term *			
1 July 20X7			
Accounts receivable		450 000	
Sales income			450 000
Sale on extended credit terms to Mechanic			
31 August 20X7			
Accounts receivable	*W1: 32 946 x 2 / 12*	5 491	
Interest income			5 491
Interest income on sale on extended credit terms to Mechanic			

W1: effective interest table	Interest income	Instalment received	Accounts receivable balance
Inception	7.32125%		450 000
End of year 1	32 946	(250 000)	232 946
End of year 2	17 054	(250 000)	0
	50 000	(500 000)	

Solution 4.3

Transaction number 1:		**Debit**	**Credit**
10 January 20X7			
Debtors		160 000	
Revenue: sales			144 535
Unearned finance income			15 465
Recognition of sale of goods			
Cost of sales		85 000	
Inventory			85 000
Cost of goods sold			
10 June 20X7			
Bank		160 000	
Debtors			160 000
Payment received from debtor			
Unearned finance income		15 465	
Revenue: finance income			15 465
Recognition of finance income			
Transaction number 2:			
10 January 20X7			
Bank		150 000	
Revenue received in advance NOTE 1			150 000
Recognition of revenue received in advance			
Cost of sales		76 000	
Inventory			76 000
Cost of goods sold			
10 October 20X7			
Revenue received in advance		150 000	
Revenue: sales			150 000
Recognition of sale of goods			
Bank	*150 000 x 3.5% x 9/12*	3 938	
Deferred income			3 938
Recognition of deferred interest income until conditions met			
Deferred income		3 938	
Revenue: interest income			3 938
Recognition of interest income once conditions met			

Note 1: IAS 18.17 considers that only an insignificant risk of ownership is retained if a sale is made with a warranty attached, in which case the recognition criteria would be met and the revenue would be recognized. However, the same paragraph (IAS 18.17) states that if a reliable estimate of the provision for warranty is not possible, then the revenue may not be recognized. Since the company had no experience with such warranties, a reliable estimate of the provision for warranties was not possible and therefore the revenue is not able to be recognized.

Solution 4.4

a) Discussion: recognition and measurement

Introduction

The receipt of the C225 000 represents revenue from services rendered. This revenue may only be recognised if all the criteria below are met.

Discussion: recognition of revenue

- The amount of revenue can be reliably measured:

  The amount of revenue is C225 000 being the cash value of the maintenance plan.

- It is probable that the future economic benefits will flow:

  The full C225 000 has been received in advance and therefore probability is assured.

- Stage of completion can be measured reliably:

  Although the stage of completion cannot be determined accurately, it is possible to make a reliable estimate thereof.

  There are three methods to choose from when estimating the stage of completion:
  - Costs to date method
  - Number of services method
  - Surveys method (work certified method).

  Since we do not know how many services will be required, the number of services method is not appropriate. Similarly, since we have not been provided with work certified by a surveyor (and such certification would be unlikely given the unspecified nature of the work to be performed), the surveys method would be inappropriate. We do have the costs incurred to date and the total expected costs for the contract and therefore this method would be the most appropriate. The reliability of these estimates is enhanced given that Mark's Maintenance Men has 10 year's of experience to draw on when making these estimates.

- Cost incurred and to be incurred can be reliably measured:

  Costs already incurred are reliably measured (by their very nature) and the future costs may be reliably estimated since Mark's Maintenance Men Ltd has 10 year's experience to draw on in making these estimates.

Conclusion: recognition of revenue

Revenue from the maintenance contract may be recognised on a percentage completion basis over the 3-year period of the contract.

Solution 4.4 continued …

a) Discussion: recognition and measurement continued …

Discussion: measurement of revenue

The receipt of the C225 000 met the criteria for recognition as revenue. The revenue must recognised over the three-year period of the contract based on the percentage completion. The method used to determine the percentage completion must be the costs method.

W1. Estimated stage of completion: services performed		**20X3**	**20X4**	**20X5**
Costs incurred to date (to date!)	*20X3: Given* *20X4: 30 000 + 45 000* *20X5: 75 000 + 75 000*	30 000	75 000	150 000
Total expected costs	*Given*	150 000	150 000	150 000
Percentage completion to date	*20X3: 30 000 / 150 000* *20X4: 75 000 / 150 000* *20X5: 150 000 / 150 000*	20%	50%	100%

W2. Revenue recognised based on stage of completion		**20X3**	**20X4**	**20X5**
Revenue recognised to date	*225 000 x 20%* *225 000 x 50%* *225 000 x 100%*	45 000	112 500	225 000
Less revenue recognised in prior years		(0)	(45 000)	(112 500)
Revenue to be recognised in current year		45 000	67 500	112 500

W3. Alternative calculation (instead of W1 and W2):

(costs incurred in CY + costs incurred in PYs) / total expected costs x total revenue – revenue recognised in PYs

- 20X3: (30 000 + 0) / 150 000 x 225 000 – 0 = 45 000
- 20X4: (45 000 + 30 000) / 150 000 x 225 000 – 45 000 = 67 500
- 20X5: (75 000 + 75 000) / 150 000 x 225 000 – 45 000 – 67 500 = 112 500

For your information:

Please note that, technically speaking, receiving revenue at the beginning of the transaction period (upfront) leads to the receipt of finance and therefore interest expense should be recognised. The effect of this financing was given to be immaterial and therefore this complication has been ignored.

If the cash were to have been received at the end of 20X5, this transaction would have involved revenue from services and revenue from interest.

Solution 4.4 continued …

b) Journals

	Debit	Credit
20X3 Journals		
Bank	225 000	
Revenue		45 000
Revenue received in advance		180 000
Amount received in 20X3		
Costs	XXX	
Creditor/ bank		XXX
Costs incurred in 20X3		
20X4 Journals		
Revenue received in advance	67 500	
Revenue		67 500
Revenue recognised in 20X4		
Costs	XXX	
Creditor/ bank		XXX
Costs incurred in 20X4		
20X5 Journals		
Revenue received in advance	112 500	
Revenue		112 500
Revenue recognised in 20X5		
Costs	XXX	
Creditor/ bank		XXX
Costs incurred in 20X5		

Solution 4.5

a) Discussion

Revenue: general discussion

- Revenue is defined as the gross inflow of economic benefits during the period, arising in the course of ordinary activities of an entity, that result in increases in equity, other than increases relating to equity participants.

  - Revenue includes transactions and events relating to
    - the sale of goods,(the sale of the clusters, sale of the produce and curios)
    - the rendering of services,(fees from grape tasting)
    - interest, royalties and dividends (interest on the deposits)
  - Amounts collected on behalf of third parties, such as VAT are not economic benefits that flow to the entity and do not increase equity, and are excluded from revenue
  - Therefore, the VAT on the sale of the clusters, from the grape tasting and the sale of the curios must be excluded

- Revenue should be measured at the fair value of the consideration received or receivable.

The recognition criteria are applied separately to each transaction.

Revenue from the sale of goods

Revenue from the sale of goods should be recognised when all the following conditions have been satisfied:

(a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods;

(b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

(c) the amount of revenue can be measured reliably;

(d) it is probable that the economic benefits associated with the transaction will flow to the entity; and

(e) the costs incurred or to be incurred in respect of the transaction can be measured reliably.

- *Sale of clusters to buyers*

  The 150 clusters:
  - The revenue is reliably measured at C25 000 000 (C28 500 000 X 100/114).
  - It is reasonable to assume that the cost to build each home is reliably measurable.
  - The significant risks and rewards of ownership were transferred and managerial involvement and effective control ceased when legal title was transferred.
  - Since transfer is usually only registered after payment has been effected, the flow of future economic benefits has probably already occurred (and there is no evidence to suggest that the inflow of economic benefits is not probable).

  The revenue from these sales may therefore be recognised.

Solution 4.5 continued …

a) continued …

The 25 clusters:

- The revenue is reliably measured at C5 000 000 (excluding VAT)
- It is reasonable to assume that the cost to build each home is reliably measurable.
- The significant risks and rewards of ownership have not yet been transferred and managerial involvement and effective control has not yet ceased since legal title has not yet transferred.
- Since only deposits have been received to date and since sales are generally made after bond approval, the inflow of economic benefits are not yet probable.

We can therefore only include the C25 000 000 in revenue for the current financial year in question (the C5 000 000 received will have to be recognised as a deposit liability).

- *Sales of curios to customers*

  - The revenue is reliably measured at C75 000 (C85 500 X 100/114).
  - The cost of the curios is reliably measurable at C38 500: invoiced price of C50 000 – C1 500 (stolen) – C10 000 (unsold stock on hand at year-end).
  - The significant risks and rewards of ownership were transferred and managerial involvement and effective control ceased when the curios were sold and taken by the customers.
  - Since curios are normally sold on a cash basis and since there is no information provided to the contrary, it is safe to assume that the inflow of future economic benefits are probable.

  Revenue of C75 000 from these sales may therefore be recognised.

- *Sale of produce*

  - The revenue is reliably measured at C2 500 000 (excluding VAT).
  - The cost of the transaction would include the commission, which is reliably measurable at 10% of the selling price: 10% x 2 500 000 = 250 000; the cost would also include the cost of the actual produce sold, which it is safe to assume would be reliably measurable by Burnt Limited.
  - The significant risks and rewards of ownership would be transferred and managerial involvement and effective control would cease when the produce was sold and taken by the customers.
  - Since there is no information provided to the contrary, it is safe to assume that the inflow of future economic benefits is probable.

  Revenue should therefore be recognised at an amount of C2 500 000 (net of VAT). The commission paid to the shopkeeper would be regarded as an expense, and not a reduction in revenue.

Revenue from the rendering of services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction should be recognised by reference to the stage of completion of the transaction at the the end of the reporting period. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

Solution 4.5 continued …

a) continued …

(a) the amount of revenue can be measured reliably;

(b) it is probable that the economic benefits associated with the transaction will flow to the entity;

(c) the stage of completion of the transaction at the end of the reporting period can be measured reliably; and

(d) the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

- *Fees from gape tasting*

  - The revenue is reliably measured at C130 000 (C148 200 X 100/114).
  - It is safe to assume that the cost of the grape tasted would be reliably measurable by Burnt Limited.
  - Given the nature of grape tasting, the stage of completion would always be 'complete'
  - The flow of future economic benefits are probable since grape tasting would normally be paid for at the time of tasting (and no evidence has been provided to suggest that the inflow is not probable).

  Revenue should be recognised at an amount of C130 000.

Revenue from the use by others of an entity's assets (interest)

Revenue arising from the use by others of entity assets yielding interest, royalties and dividends should be recognised when:
(a) it is probable that the economic benefits associated with the transaction will flow to the entity; and
(b) the amount of the revenue can be measured reliably.

- *Interest*

Interest should be recognised on a time proportion basis that takes into account the effective yield on the asset

Revenue from interest amounting to C2 500 will be included. In this instance only 50% of the interest for the two months accrues to Burnt Limited, as the other 50% will be paid to the purchaser on transfer of the property (C250 000 x 12% x 2/12 x 50%).

b) Revenue note disclosure

BURNT LIMITED
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 MARCH 20X4

		C
8. Revenue		
Sales to customers	(28 500 000 x 100/114 + 85 500 x 100/114 + 2 500 000)	27 575 000
Sales from services rendered	(148 200 X 100/114)	130 000
		27 705 000
Interest received	(250 000 x 12% x 2/12 x 50%)	2 500
Total revenue		27 707 500

Solution 4.6

Recognition of revenue from sale of consignment stock

Revenue from the sale of goods may only be recognised when all of the following criteria are met:

- Significant risks and rewards of ownership are transferred from seller to buyer: although the rewards of ownership have been transferred to Gareth Ltd to the full extent of the C500 000 consignment sales made during the year, (since the profit on the future sale thereof will vest in Gareth Ltd), the risks of ownership remain with Mitch Ltd in respect of the C200 000 of the consignment sales that have not yet been sold at year-end (the goods will ultimately be returned to Mitch Ltd if they are not sold by Gareth Ltd).

- Seller retains neither continuing managerial involvement nor effective control over the goods sold: not met since Mitch Ltd dictates the retail selling price of the goods remaining in Gareth Ltd's shop, worth C200 000

- Amount of revenue can be reliably measured: this criteria is met since the consignment sales price was set at C500 000.

- Costs incurred and to be incurred can be reliably measured: the goods have already been manufactured and therefore the cost thereof would be known to Mitch Ltd.

- Probable that future economic benefits will flow to the seller: past experience seems to suggest that the consignment stock sold to Gareth Ltd *will* be sold to the public at which point Gareth Ltd will owe Mitch Ltd the consignment sales price, (there is no evidence that Gareth Ltd is a bad debt), and therefore, it could be argued that this criteria is met.

Conclusion

Only C300 000 of the consignment sales should be recognised as revenue, since not all recognition criteria for the C200 000 sales have been met.

Solution 4.7

Revenue from services rendered: estate agent's commission

The estate agency has provided a service to the seller (Mr. Caveman) in finding a buyer for his property. The reward for this is the commission. Revenue from services rendered may be recognised when:

- *The amount of revenue can be reliably measured:*
  The commission is reliably measured at C14 000.

- *The costs incurred to date and the costs expected to be incurred to complete the contract can be reliably measured:*
  The costs incurred to date, it is assumed, may be reliably measured. In the case of an estate agency, most legal costs are borne by the seller (or purchaser in certain instances) and the costs of finding a buyer, in terms of petrol and vehicle maintenance costs, are borne by the individual estate agent rather than the estate agency. The costs incurred by an estate agency would therefore be of a general administrative nature (electricity, telephone, rental of premises etc) and include the percentage commission payable to the agent responsible for the sale (in this case C8 000).

- *The stage of completion can be reliably measured:*
  The mandate was to find a purchaser and although this appears to have been achieved, the purchaser is not a confirmed purchaser until the expiry of the 3-month cooling off period. This criteria, it is argued, is not met.

- *It is probable that the future economic benefits will flow to the entity:*
  The commission will only be probable once the 3-month cooling off period has expired and the purchaser has not backed out of the offer. Once this has happened, a firm of lawyers will deduct the commission from the funds collected from the purchaser on behalf of the seller and pay this over to the estate agency and therefore there would seldom be a bad debt.

Conclusion:

The commission of C14 000 should be recognised as revenue only once the 3-month cooling off period has expired and the purchaser has not backed out of the offer. No revenue should, therefore, be recognised in 20X3.

Solution 4.8

a) Discussion

Introduction:
This contract involves revenue from services rendered. Interest has been ignored on the basis that the contract period appears to be relatively short since three of the fifteen floors were completed within one month – and these were the worst floors, suggesting that the entire contract will be completed very soon. Furthermore, no information has been provided when the contract price is to be paid: upfront (which would lead to interest expense for Jillianne Limited), at the end of the contract (which would lead to interest revenue) or piecemeal during the contract (which would probable not result in interest of any kind).

Recognition criteria for revenue from services rendered:
Revenue from services rendered should be recognised when all the following criteria are met:
- Revenue can be reliably measured
- The inflow of economic benefits is probable
- The stage of completion is reliably measurable.
- Costs can be reliably measured

The stage of completion can be measured using:
- Costs to date as a percentage of total costs to date;
- Work certified as a percentage of total contract price; or
- Physical inspection method.

Discussion:
- The revenue can be reliably measured since the contract price has been fixed at C30 000.
- The costs can be reliably measured since this has already been estimated based on past experience to be C18 000.
- The inflow is probable since Jillianne Ltd had many previous dealings with the hotel.
- The stage of completion can be reliably measured based on costs to date as a percentage of total costs to date: C6 000 / C18 000 = 33%
  The physical inspection approach using 3 floors/ 15 floors (20%) would *not* be the most appropriate since the 3 floors include the hotel's most damaged furniture and thus the company has done more than the 20% of the work to date. Similarly, the work certified method would obviously not be appropriate since not certifications have been provided.

Conclusion:
Therefore, 33% x C30 000 = C10 000 should be recognised as revenue in the statement of comprehensive income of Jillianne Ltd for the year ended 31 December 20X4.

b) Journals

20X4 Journals	**Debit**	**Credit**
31 December 20X4		
Cost of services rendered	6 000	
Bank/ Creditor		6 000
Cost of re-upholstery: first 3 floors of hotel		
31 December 20X4		
Debtor	10 000	
Revenue from services rendered		10 000
Revenue from re-upholstery: first 3 floors of hotel:6 000 / 18 000 x 30 000		

Solution 4.9

a) Discussion

Introduction

The issues to be discussed include the recognition and measurement of revenue, of which there are two types within the one sale agreement: sales revenue and interest revenue.

Sales revenue:

Recognition criteria:

- The significant risks and rewards associated with ownership have been transferred from the seller to the buyer;
- Managerial involvement to the extent normally associated with ownership of an asset must have ceased, as should the effective control thereof;
- Revenue is reliably measurable;
- Costs related to the sale are reliably measurable; and
- It is probable that future economic benefits resulting from the sale will flow to the entity.

Discussion:

- The significant risks have been transferred from seller to buyer since Outdoors Limited (the buyer) is responsible for the insurance and transport as of 1 March 20X5; the rewards have been transferred from Caravan Limited to Outdoors Limited since Caravan Limited no longer has physical or legal possession of the caravans whereas Outdoors Limited now does.
- Managerial involvement and effective control by Caravan Limited has ceased evidenced by the fact that Caravan Limited has no physical control over the inventory and is no longer financially involved in the insurance thereof.
- Revenue is reliably measurable at the cash cost per caravan (net of the trade discount): C50 000 x 10 caravans = C500 000
- Costs are reliably measurable using a mark-up of 30% on cost: C58 500 / 130 x 100 = C45 000

The recognition criteria for the recognition of revenue from the sale of the caravans are therefore all met on 1 March 20X5 and therefore revenue of C500 000 must be recognised on 1 March 20X5.

Interest revenue:

Since the caravans were sold on an instalment basis, there is effectively an interest revenue component to this transaction. The amount owing in respect of the sale on 1 March 20X5 is C500 000 and yet only C100 000 was received on this day. This means that the balance of C400 000 was effectively financed.

Interest revenue is recognised and measured using the effective interest rate method, apportioned on a time basis.

The interest rate used by Caravans Limited is 15%. The interest revenue to be recognised each year can therefore be calculated as follows:

Solution 4.9 continued …

a) continued …

W1: Effective interest rate table:

	O/bal	Interest	Bank	C/bal
1 March 20X5	500 000		(100 000)	400 000
28 February 20X6	400 000	60 000	(200 000)	260 000
28 February 20X7	260 000	39 000	(299 000)	0
		99 000	(599 000)	

W2: Time apportionment:

20X5

Interest income: 60 000 x 10/12 = 50 000

20X6

Interest income first 2 months: 60 000 x 2/12 = 10 000
Interest income next 10 months: 39 000 x 10/12 = 32 500
Total = 10 000 + 32 500 = 42 500

20X7

Interest income first 2 months: 39 000 x 2/12 = 6 500

Solution 4.9 continued …

b) Journals

	Debit	Credit
Journals for year ended 31 December 20X5		
1 March 20X5		
Debtor	500 000	
Sales revenue		500 000
Recognition of sale of 10 caravans at 50 000 each		
1 March 20X5		
Cost of sales	450 000	
Inventory		450 000
Cost of 10 caravans sold: 58 500 / 1.3 x 10 caravans		
1 March 20X5		
Bank	100 000	
Debtors		100 000
Receipt of deposit		
31 December 20X5		
Debtors	50 000	
Interest revenue		50 000
Interest income: for calculations, see part (a): W2: 20X5		
Journals for year ended 31 December 20X6		
28 February 20X6		
Bank	200 000	
Debtors		200 000
Receipt of instalment		
31 December 20X6		
Debtors	42 500	
Interest revenue		42 500
Interest income: for calculations, see part (a): W2: 20X6		
Journals for year ended 31 December 20X7 (*not required*)		
28 February 20X7		
Debtors	6 500	
Interest revenue		6 500
Interest income: for calculations, see part (a): W2: 20X7		
28 February 20X7		
Bank	299 000	
Debtors		299 000
Receipt of instalment		

Solution 4.10

W1: Effective interest rate table

	Interest income	Service income	Instalment received	Debtor balance
1 January 20X6	10%			21 528 170
31 December 20X6	2 152 817	600 000	(10 000 000)	14 280 987
31 December 20X7	1 428 099	1 200 000	(10 000 000)	6 909 086
31 December 20X8	690 909	2 400 000	(10 000 000)	(6)
	4 271 824	4 200 000	(30 000 000)	*Rounding error*

		Debit	Credit
1 December 20X6			
Debtor	*2 152 817 x 10 customers*	21 528 170	
Sales			21 528 170
Sale of 10 vehicles			
31 December 20X6			
Debtor		2 752 817	
Interest income	*W1*		2 152 817
Service income	*50 000 x 120% x 10*		600 000
Interest income and service income earned			
Bank	*(1 000 000 x 10)*	10 000 000	
Debtor			10 000 000
Receipt of instalment from debtors (10 customers)			
31 December 20X7			
Debtor		2 628 099	
Interest income	*W1*		1 428 099
Service income	*100 000 x 120% x 10*		1 200 000
Interest income and service income earned			
Bank	*(1 000 000 x 10)*	10 000 000	
Debtor			10 000 000
Receipt of instalment from debtors (10 customers)			
31 December 20X8			
Debtor		3 090 909	
Interest income	*W1*		690 909
Service income	*200 000 x 120% x 10*		2 400 000
Interest income and service income earned			
Bank *(1 000 000 x 10)*		10 000 000	
Debtor			10 000 000
Receipt of instalment from debtors (10 customers)			

Solution 4.11

a) Discussion

Introduction:
This transaction involves two types of revenue:
- Revenue from the sale of goods
- Interest revenue

Discussion: revenue from sale of goods
The revenue from the sale of the machine may only be recognised when all the following criteria are met:
- The significant risks and rewards of ownership are transferred to the buyer.
  The significant risks and rewards are transferred on the date of delivery: 30 November 20X3, when the risks are transferred to the buyer (costs of insurance, maintenance and repairs were then for the account of the customer) and all rewards from the use of the machine will be earned by the buyer. Although the buyer requested that the machine be delivered as soon as possible, the delivery was delayed since the required factory machine was not in stock and due to inefficiencies in the ordering system.
- The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold.
  Managerial involvement and effective control by Roger Ltd ceased on 30 November 20X3 when delivery was accepted by the customer and the insurance over the machine was cancelled.
- The amount of revenue can be reliably measured
  The revenue from the sale is the fair value being the net cash selling price that was agreed to at the time of the transaction: C240 000 – C40 000 = C200 000
- It is probable that the economic benefits associated with the transaction will flow to the entity.
  No evidence has been given to suggest that the customer may be a bad debt and furthermore, the customer is one of Roger Ltd's regular customers and therefore we can assume the inflow of future economic benefits to be probable.
- The costs incurred or to be incurred in respect of the transaction can be reliably measured.
  The cost of the machine may be reliably measured based on the invoice price converted into the local currency plus all related and necessary costs of transport and insurance from the date of purchase from the foreign supplier to the date on which it became available for sale locally: C150 000 + C20 000 = C170 000.

Discussion: revenue from interest
Interest revenue should be recognised using the effective interest rate method over the period that the finance is offered. The interest may be calculated as follows:

Year	Opening balance	Interest (at 12.937%)	Instalment (given)	Closing balance
31/11/X4	200 000	25 874	(20 000)	205 874
31/11/X5	205 874	26 634	(20 000)	212 508
31/11/X6	212 508	27 492	(240 000)	0
		80 000	280 000	

The interest should be recognised as follows, measured on a proportionate time basis:
- 31/12/20X3: C25 874 x 1/12 = C2 156
- 31/12/20X4: C25 874 x 11/12 + C26 634 x 1/12 = C25 937
- 31/12/20X5: C26 634 x 11/12 + C27 492 x 1/12 = C26 705
- 31/12/20X6: C27 492x 11/12 = C25 202

Solution 4.11 continued …

a) continued …

Conclusion:
The revenue from the sale of the machine of C200 000 should be recognised on the date of the delivery, that is, 30 November 20X3 whereas the interest should be recognised over the three year period of the financing with C2 156 recognised in 20X3 and C25 937 in 20X4.

20X4 Journals are overleaf …

Solution 4.11 continued …

b) Journals

20X3 Journals		Debit	Credit
9 October 20X3			
Inventory		150 000	
Foreign creditor			150 000
Purchase of a machine: risks and rewards transferred to Roger Ltd on 9 October			
Evidenced by: taking out insurance over goods purchased from this date			
1 November 20X3			
Inventory		20 000	
Foreign creditor			20 000
Costs relating to purchase of machine shipped to Roger Ltd's premises			
Purchase recognised on arrival of goods at Roger Ltd's premises			
30 November 20X3			
Cost of transport and insurance expense		10 000	
Foreign creditor			10 000
Cost of shipping the machine to the customer (selling cost):			
The date of sale is 30 November since the delay was our fault. if the delay had been at the customer's request, the date of sale would have been 1/11			
Debtor		200 000	
Sale			200 000
Sale of a machine (net of discounts: 240 000 – 40 000)			
Cost of sales		170 000	
Inventory			170 000
Cost of sale: 150 000 + 20 000 = 170 000			
15 December 20X3			
Foreign creditor		180 000	
Bank			180 000
Foreign creditor paid			
31 December 20X3			
Debtor	(25 874 x 1/12)	2 156	
Interest			2 156
Interest earned on debtor's balance			
Tax		6 647	
Current tax payable			6 647
Tax on sale and interest less costs incurred:			
(200 000 + 2 156 – 170 000 – 10 000) x 30%			

Solution 4.11 continued …

b) Journals continued …

20X4 Journals	Debit	Credit
30 November 20X4		
Bank	20 000	
Debtor		20 000
First instalment received		
31 December 20X4		
Debtor	25 937	
Interest		25 937
Interest earned on debtor's balance (25 874 x 11/12) + (26 634 x 1/12)		
Tax	7 781	
Current tax payable		7 781
Tax on interest earned on interest income: 25 937 x 30%		

c) Disclosure

ROGER LTD
EXTRACTS FROM STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 20X3

		Note	20X3 C	20X2 C
Revenue from sales			320 000	100 000
Cost of sales	(50 000 + 170 000)		(220 000)	(60 000)
Gross profit			100 000	40 000
Other income	(80 000 + 60 000 + 92 156 + 10 000) (80 000 + 60 000 + 100 000 + 20 000)		242 156	260 000
Other costs	(60 000 + 10 000)		(70 000)	(50 000)
Finance charges	(just the finance charges incurred)		(100 000)	(110 000)
Profit before tax			172 156	140 000
Income tax expense	(40 000 + 6 647)		(46 647)	(40 000)
Profit for the period			125 509	100 000
Other comprehensive income			-	-
Total comprehensive income			125 509	100 000

Solution 4.12

a)

Introduction and recognition criteria: sale of prepaid vouchers

The recognition criteria relating to revenue from the sale of goods (per IAS 18), given below, needs to be considered:

- The significant risks and rewards of ownership are transferred to the buyer.
- The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold.
- The amount of revenue can be reliably measured
- It is probable that the economic benefits associated with the transaction will flow to the entity.
- The costs incurred or to be incurred in respect of the transaction can be reliably measured.

Discussion

- The revenue is reliably measured: C30 000.
- The flow of economic benefits is probable: the cash has already been received.
- In the case of the unredeemed gift vouchers:
  - the revenue is reliably measured: C2 000
  - since the recipient of the certificate has not yet exchanged it for merchandise the cost of the merchandise is not known;
  - since the C2 000 vouchers have not been exchanged for goods, these goods are still in the possession of the seller, and therefore the risks and rewards have not yet transferred from the seller to the buyer and managerial involvement and effective control would also not have ceased.
- In the case of the redeemed vouchers:
  - the revenue is reliably measured: C28 000
  - since the recipient of the certificate has already exchanged it for merchandise the cost of the merchandise would be known;
  - since the vouchers to the value of C28 000 have already been exchanged for goods, the risks and rewards thereof have been transferred and managerial involvement and effective control would also have ceased.

Therefore, only the C28 000 in respect of redeemed vouchers may be recognised; the C2 000 received should be treated as a liability since it is a present obligation to a potential customer. The critical event relative to the recognition of the liability is the supply of the merchandise selected by the customer.

It should be noted that the assumption was made that the certificate could neither be converted into cash nor set-off against an outstanding amount.

b)

If the vouchers had expiry dates, the value of the expired vouchers would be recognised as revenue on expiry date, whereupon the cost of the merchandise would be zero. Until such time as the vouchers are recognised as revenue, they would be recognised as liabilities (income received in advance).

Solution 4.13

Part A: Instalment sale

An installment sale involves two transactions:
- the sale and
- the financing of the sale.

An installment obligates the purchaser to complete all the payments since the purchaser has taken possession of the goods.

The revenue from the installment sale (C1 000 x 5 – interest revenue) may be recognised in the financial statements of Battleship Gallactica Limited when all of the recognition criteria have been met. The recognition criteria are met when:
- the *significant* risks and rewards of ownership have passed to the buyer: since the goods have been delivered, the risks and rewards have obviously passed;
- managerial involvement to *the extent normally associated with ownership and effective control* over the goods ceases: since the goods have been delivered, managerial involvement has ceased;
- the revenue can be reliably measured: C5 000 – interest calculated on the effective interest rate method;
- the costs are reliably measurable: using either the supplier invoice or working back from the selling price to the cost price by using either the entity's gross profit percentage or mark up; and
- it is probable that the economic benefits associated with the transaction will flow to the entity: no evidence to the contrary was provided.

The interest element included in the installments should be recognised over the period of the installment sale contract using the effective interest rate method.

Part B: Lay away sale

A lay away sale does not involve financing and, since the goods are not collected by the purchaser until all installments are paid, there is no obligation for the purchaser to complete all the payments.

The revenue from the lay away sale (C1 000 x 5) may be recognised in the financial statements of Battleship Gallactica Limited when the goods are delivered. However, if experience indicates that most such sales are consummated, revenue may be recognised when a significant deposit is received provided the goods are on hand, identified and ready for delivery to the buyer.

Solution 4.14

Introduction

Revenue is defined by IAS 18 as:

- the gross inflows of economic benefits;
- during the period;
- arising in the course of ordinary activities of an entity;
- when those inflows result in increases in equity,
- other than increases relating to contributions from equity participants.

In terms of the contract C3 000 will be paid to Sporty Limited and meets the definition of revenue in that:

- the C3 000 is a gross inflow of economic benefits,
- the amount will be received/receivable in the current period,
- as a result of the ordinary activities of the gym (the gym's primary business is to provide the client with gym facilities), and
- the amount is not a contribution from the equity participants (not a sale of shares).

The selling of the gym contract should therefore be recognised as revenue in the financial statements of Sporty Limited.

The sale of a gym contract must be assessed in order to determine if it is either:

- A sale of goods;
- Rendering of services; or
- Royalties, interest or dividends.

The provision of gym facilities to gym members is a rendering of a service.

Revenue from the rendering of services is recognised when all the following criteria are met:

- the revenue can be reliably measured;
- the costs can be reliably measured (costs incurred to date and costs still to be incurred);
- it is probable that the economic benefits expected will flow to the entity; and
- the stage (percentage) of completion can be reliably measured.

A discussion of these recognition criteria is provided below:

- The revenue is stated in the contract as C3 420. This amount includes VAT. The revenue must be calculated as C3 420 x 100/114. The revenue is therefore reliably measurable at C3 000, (with a VAT liability owing to the tax authority of C420).
- Since the gym has been opened for eleven months, there is sufficient past experience upon which to base a reliable estimate of the cost involved in providing these services.
- Since the contract price is paid before the services are provided, the inflow of economic benefits are not only probable but certain.
- The stage of completion in this case is the most difficult to estimate. The following are the three methods from which to choose:
  - surveys of work performed;
  - services already performed as a percentage of the total services to be performed; and
  - the costs incurred to date as a percentage of the total costs to be incurred.

Solution 4.14 continued …

In the case of Sporty Limited none of the above methods would be appropriate. Although research has proven that the contracts would be used 80% in the first year, 15% in the second and 5% in the third year, the revenue should not be recognised in this pattern. Even if the client does not utilise the gym in the second and third year, the gym would still be obliged to make the service available to the user. According to IAS 18, 'when services are performed by an indeterminate number of acts over a specified period of time, revenue is recognised on a straight-line basis over the specified period unless there is evidence that some other method better represents the stage of completion. When a specific act is much more significant than any other acts, the recognition of revenue is postponed until the significant act is executed' (IAS 18, para 25). Since there is no one significant act, it would be appropriate to recognise the revenue evenly over the period of the contract.

Conclusion

The amount received is therefore revenue received in advance and should initially be recognised as a liability, and reversed evenly over the contract period to revenue: C1 000 per year. Where the contract is sold during a year, the C1 000 would have to be calculated on a pro-rata basis e.g. a sale on 1 October in the current year, would require the current year revenue to include C1 000 x 3/12 = 250.

Solution 4.15

a)

- Warthogs Limited only retain an insignificant risk of ownership in that on average only 2% (2/100) of broomsticks are defective.

    - Warthogs is able to reliably/reasonable estimate repair and replacement costs thereby warranting the recognition of revenue at the date of sale.
    - An appropriate provision for repairs/ replacements in terms of the warranty contract should be recognised/raised at the date of sale.

- It is probable that there will be an inflow of economic benefits in the form of sales revenue (C750 per broomstick sold) which can be reliably measured in terms of the sales agreement.

- Warthogs is able to reliably measure the costs of each broomstick sold (C750/125% x 100% = C600).

- Once the broomstick has been sold, Warthogs no longer has any managerial involvement in the use of the broomstick.

Therefore, since the recognition criteria for a sale are all met, Warthogs Limited should recognise revenue at the date of sale and recognise a warranty provision for the estimated repair/ replacement costs.

b)

The installation of the air-conditioning unit constitutes a significant portion of the sales price:

- The rewards of ownership have not been transferred to the buyer until the air-conditioning unit has been installed and is operational at the buyer's premises.

- The revenue is able to be reliably measured as it is stipulated in the sale agreement and it is probable that economic benefits will flow to the entity once the air-conditioning unit has been successfully installed.

- Warthogs Limited relinquishes managerial involvement in the air-conditioning unit only once the unit has been installed.

- The costs incurred by Warthogs to distribute and to install the unit can only be reliably measured once the unit has been installed. (Or: a reliable estimate of the costs that will be incurred by Warthogs Limited to distribute and install the unit is probably possible based on past experience).

Therefore, since all the recognition criteria for the sale will only be met on installation of the system, Warthogs Limited should only recognise revenue arising on the sale of an air-conditioning unit, once installation is complete.

Solution 4.15 continued . . .

c)

- Prior to the purchaser being awarded the contract, Warthogs retains a significant portion of the risks of ownership.

- Although the sales amount can be reliably measured there is uncertainty at the date of the sale surrounding the probability of the return (inflow of benefits) which is contingent on the purchaser being awarded the contract. This could have an impact on the measurement of the sales revenue if the contract is only awarded much later (i.e. the revenue may need to be measured at the present values of future sales revenue).

- Warthogs Limited will only relinquish managerial involvement in the lawnmower once the purchaser has been awarded the gardening contract.

- A reliable estimate of the cost of the lawnmower is probably possible based on past experience.

Therefore, since all the recognition criteria for the sale will only be met when it is certain that the purchaser will be granted the gardening contract, Warthogs Limited should only recognise the revenue when it is certain that the purchaser will be granted the gardening contract.

d)

- Since the newspapers have been sold on consignment and the number of newspaper sales to the public is not predictable, Warthogs Limited has not transferred the risks of ownership (i.e. the risk of the costs associated with producing the paper not being recouped).

- The amount of revenue can only be reliably measured once Warthogs knows the number of newspapers sold.

- Warthogs Limited will only relinquish managerial involvement in the newspapers once they have been sold to the public (all unsold newspapers will be returned to the Warthogs Limited).

- A reliable estimate of the cost of the newspapers is probably possible based on past experience.

Therefore, revenue should only be recognised when Warthogs is certain of the number of papers sold on their behalf. Prior to this stage the probability of an inflow of benefits is uncertain based on the unpredictability of newspaper sales.

Solution 4.16

a)

In terms of IAS 18 Revenue, in order to reflect the substance of the transaction it may be necessary to apply the recognition criteria to the separately identifiable components of a single transaction. The sale of a Caris 1600, including service plan, to Mr Nick has two separately identifiable components: one being the sale of the vehicle and the second being the sale of a service plan. Each component needs to be discussed and recognised separately.

The sale of the motor vehicle:
In order for revenue to be recognised on the sale of the vehicle to Mr Nick, all of the following conditions need to be met:

- The significant risks and rewards of ownership must be transferred. The significant risks and rewards of ownership are transferred to Mr Nick, the buyer on 1 April 20X6 when Mr Nick takes delivery of the vehicle. From this date Mr Nick is responsible for insuring and maintaining the vehicle and receives the rewards from the use of the vehicle.
- No management involvement or control over the vehicle must exist. Jabulani Motors retains neither continuing management involvement nor control over the vehicle once Mr Nick has taken delivery of the vehicle: Jabulani Motors no longer has physical possession of the vehicle and is no longer responsible for insuring the vehicle.
- The amount of revenue must be able to be reliably measured. The amount of revenue can be measured reliably as the price has been agreed to in Mr. Nick's signed offer to purchase. The revenue attributable to the sale of the vehicle is C142 220 (C147 500 – C5 280 [NOTE 1] relating to the service plan – see below for calculations).
- The inflow of economic benefits must be probable. This criteria is met since Mr Nick has entered into a loan agreement with Tafcat bank, which paid the full amount of C147 500 to Jabulani Motors on 1 April 20X6.
- The costs incurred must be reliably measurable. The costs incurred in respect of the transaction can be measured reliably since Jabulani Motors works on a standard 25% gross profit percentage: C142 220/ 100% x 75% = C106 665

As all of the above conditions have been met Jabulani Motors Limited should recognise revenue from vehicle sales of C142 220.

NOTE 1: The revenue from the services of 5 280 would normally have been present valued and then this present value would have been deducted from the total price of 147 500. This was not done in this question since the question indicated that discounting should be ignored.

The sale of the service plan:
In terms of IAS 18, the outcome of the sale of the service plan can be measured reliably when all of the following conditions are met:

- The amount of revenue must be able to be reliably measured. The amount of revenue can be measured reliably as customers are usually charged C880 for a service and the plan either covers 5 years or 90 000km. This means that, at most, 6 services (90 000km/ 15 000km), would be performed. Therefore C5 280 (C880 x 6 services) of the total selling price would be attributable to the service plan.
- The inflow of economic benefits must be probable. It is probable that the economic benefits associated with the transaction will flow to the entity, given that Jabulani Motors received the full price of C147 500 (which includes the C5 280 for the services) from Tafcat Bank on date of sale (i.e. 1 April 20X6).
- The stage of completion must be able to be reliably measured. The stage of completion of the transaction can be measured reliably at the end of the reporting period based on the number of services performed to date as a percentage of 6 total services. Mr. Nick's first service was performed in August 20X6, which means that at 30 September 20X6, the percentage complete is 16.7% (or 1/6).

Solution 4.16 continued …

a) continued …

- The costs incurred and the costs to complete the transaction must be reliably measurable. The costs incurred for the transaction and the costs to complete the transaction can be measured reliably as Jabulani Motors marks up the cost of parts and labour on services by 33 1/3% and the selling price (C880) of a service is known. This means that the cost of the service must be C660 (880 / 133% x 100%), and to complete the remaining service will cost, at most C3 300 (5 remaining services x 660).

Revenue in respect of the service plan must be measured using the percentage completion method, using the number of services performed to date as an indicator of the percentage completed. The revenue should therefore be recognised as follows:

- The revenue for one service should be recognised in the financial statements at 30 September 20X6: C880 (5 280 x 1/6);
- the balance of the service revenue must be deferred as a liability (and presented as a current liability) until the remaining services have been performed or the 5 year period has expired: C4 400 (5 remaining services x 880).

Note: the receipt of the 147 500 on date of sale, including an amount for services, suggests that there is an element of financing and that interest expense should therefore be recognised. The question has indicated that the effects of discounting should be ignored thus this complication was ignored.

Solution 4.16 continued …

b)

JABULANI MOTORS LIMITED
EXTRACT FROM STATEMENT OF COMPREHENSIVE INCOME
FOR YEAR ENDED 30 SEPTEMBER 20X6

		Notes	C
Revenue	*Sales: C142 220 x 100 + Services: 70 400 (W1)*	3	14 292 400
Cost of sales and services	*C14 222 000/ 100% x 75% + C70 400/ 133.3% x 100%*		10 719 300

W1: (5 280 x 100 x 20% x 1/6) + (5 280 x 100 x 30% x 2/6) and W2: 880 x 6 services = 5 280

JABULANI MOTORS LIMITED
EXTRACT FROM STATEMENT OF FINANCIAL POSITION
AS AT 30 SEPTEMBER 20X6

		C
EQUITY AND LIABILITIES		
Current liabilities *		
Service revenue received in advance	C5 280 x 100 – 70 400	457 600

** the services could be earned over a period of 5 years or could be earned over a shorter period if the driver completes the 90 000 km maximum mileage before the 5 year limit. A more prudent approach would be to assume that the liability is a current liability rather than a long-term liability.*

JABULANI MOTORS LIMITED
EXTRACT FROM NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 30 SEPTEMBER 20X6

		C
3. Revenue		
Revenue comprises:		
Sales of motor vehicles	*100 x 142 220*	14 222 000
Servicing of motor vehicles	*100 x 20% x 5 280 x 1/6 + 100 x 30% x 5 280 x 2 / 6*	70 400
		14 292 400

Solution 4.17

a)

Introduction
The issue is whether the amounts received should be treated as revenue (income earned in the current period) or as a liability (income received in advance). The nature of the revenue *could* be seen as either a sale of goods (in this case the cards) or the rendering of a service. In this case, it is argued that the most important/ significant aspect of the transaction is the rendering of a service by Born 2 Speak rather than the sale of a mere plastic card.

The revenue recognisable must be subject to the recognition criteria in IAS 18, 'Revenue'. The recognition of a liability must be as per The Framework.

Revenue

Revenue is defined in IAS 18 as:
- Gross inflows of economic benefits,
- During the year,
- Arising from ordinary activities,
- Resulting in increases in equity other than an increase arising from contributions of equity participants.

According to The Framework, income (including revenue) can only be recognised when the increase in economic benefits:
- is probable and
- can be measured reliably.

Although there has legally/ technically been a 'sale', revenue will be recognised as 'revenue from services' (since the resultant ability to use the card to make calls for 3 months, being a provision of a service, is the most significant aspect to the 'sale' transaction). The revenue from such 'sale' transactions must therefore be recognised based on the recognition criteria relevant to 'provision of services' transactions.

As per IAS 18, the revenue should be measured by reference to the stage of completion, once the outcome of the transaction can be estimated reliably.

The revenue recognition criteria for services rendered are as follows:

Revenue should be reliably measured
Revenue is measured in terms of the selling price per card (excluding VAT) multiplied by the number of cards sold.

Probable that economic benefits will flow to the entity
Because the amount is paid in advance, the economic benefits have already flowed to the entity.

Stage of completion must be reliably measured
This will relate to the extent to which users have utilised the services that they were entitled to.
- For Airtime cards, this can be calculated over the 3 month life.
- For Call cards, this can be based on experience, past usage or a computerised check.

Solution 4.17 continued …

a) continued …

Reliable measurement of costs
It is reasonable to assume that the entity will be able to reliably measure the cost of its cards and its services.

Liability
The portion of amounts received to date that relate to services not yet rendered, should be recognised as a liability, being income received in advance.

A liability is defined in The Framework as:
- A present obligation of the entity
- As a result of a past event
- That will result in the outflow of economic benefits.

For a liability to be recognised, The Framework sets out recognition criteria as follows:
- the outflow of economic benefits must be probable; and
- the cost should be measured reliably.

Discussion:
- The obligation exists as the company has to provide services to the purchasers of the cards.
- The past event was the sale of the cards by the company which creates the obligation of service.
- The outflow of economic benefits will be in the form of resources used by the entity when providing the service in respect of its obligations.
- Reasonable to assume that outflow of benefits are probable and can be reliably measured.

Tax consequences – assuming that income received in advance is taxed in the year of receipt while accounted for in the books on an accrual basis, a temporary difference and therefore deferred tax would arise on this transaction.

VAT consequence – the VAT is received on behalf of the tax authorities and is thus not included as part of the income.

Conclusion

The proceeds can be divided into revenue and a liability. The revenue is earned from the rendering of a service and as a portion of the receipt complies with that definition, that portion of the receipt should be recognised as revenue.

The accrual basis of accounting requires the recognition of the effects of transactions when they occur (and to the period to which they relate) and not as cash is received or paid.

The portion of cash received for which a service is still to be rendered should therefore be recognised as a liability: the entity has an obligation to provide a service in respect of the coverage to be provided.

Solution 4.17 continued …

b)

		Dr	Cr
Bank/ Debtors (A)		15 686 400	
Revenue (I)	*(8 500 000 + 4 480 000)*		12 980 000
Revenue received in advance	*(500 000 +280 000) (L)*		780 000
Output VAT (L)	*(15 686 400 x 14/114)*		1 926 400
Cash received over the year			
Commission expense	*(1 495 000 100 / 114)*	1 311 404	
Input VAT (A)	*(1 495 000 14 / 114)*	183 596	
Liability/ Bank	*(90 000 + 59 500) x 10*		1 495 000
Cash paid over the year			

Workings

W1: **Number of cards sold**	**Airtime cards (units)**	**Call cards (units)**
Amount sent to retailers	100 000	60 000
Unsold at retailers	10 000	500
Therefore, total cards sold to customers	90 000	59 500

W2: **Revenue generated by 'sales'**		**Total receipts (including VAT)**	**VAT liability**	**Total revenue**	**Revenue Recognised in 20X2**	**Revenue received in advance (L)**
Airtime cards	90 000 x C114; 10 260 000 x 14/114; 10 260K – 1 260K;	10 260 000	1 260 000	9 000 000	[(a)]8 500 000	[(a)]500 000
Call cards	59 500 x C91.20 5 426 400 x 14/114 5 426 400 – 666 400	5 426 400	666 400	4 760 000	[(b)]4 480 000	[(b)]280 000
		15 686 400	1 926 400		12 980 000	780 000

Airtime cards

Of the 90 000 airtime cards sold to customers, the entity still has to render services in respect of the cards sold in November and December. Since research indicates that most sales occur at the beginning of the month and that usage is constant over the three month service period, almost all airtime cards sold in October would have expired by year end. The amount of service to be provided can be calculated by dividing the number of cards by 3 to obtain a monthly figure based on the facts that sale occurs at the beginning of the month and usage is even over the 3 months:

- In respect of November's sales, only one month of service is owed as at December. This can be calculated as: (3000/3) x 1 = 1 000.
- In respect of December sales, two months service is owed at year end date. This can be calculated as: (6000/3) x 2 = 4000
- By adding the units of service owed, we come to a total of 5 000 units still owed at year end.

The sales of 90 000 cards should therefore be recognised as follows:

- 85 000 (90 000 – 5 000) cards should be recognised as revenue: C100 x 85 000 = C8 500 000;
- 5 000 cards should be recognised as a liability: C100 x 5 000 = C500 000.

Note: The unit price is taken excluding VAT: C100 = (C114 x 100/114)

Solution 4.17 continued …

Workings continued …

Call cards

Of the 59 500 cards sold, the entity is only liable to provide a service on 1 000 cards to the extent of 100% and 5 000 cards to the extent of 50%. Therefore in total, an obligation exists for 3 500 units:

- [1 000 (1 000 x 100%) + 2 500 (5 000 x 50%)].

The sales of 59 500 cards should therefore be recognised as follows:

- 56 000 cards (59 500- 3 500) as revenue: C80 x 56 000 = C4 480 000;
- 3 500 cards as a liability at year-end: C80 x 3 500 = C280 000.

Note: The unit price is taken excluding VAT: C80 = (C91.20 x 100/114)

Summary

Airtime Cards	100 000 – 10 000 = 90 000 x R100	=	R9 000 000	**R**	85 000 x R100	=	R8 500 000
				L	5000 x R100	=	R500 000
							R9 000 000
Call cards	60 000 – 500 = 59 500 x R80	=	R4 760 000	**R**	56 000 x R80	=	R4 480 000
				L	3 500 x R80	=	R280 000
							R4 760 000

Solution 4.18

a) Initial recognition and measurement

IFRIC 13 paragraph 5 states that paragraph 13 of IAS 18 must apply to the accounting of loyalty points.

Loyalty points should be recognised as a separately identifiable component of the sales transaction in which they are granted. The fair value of the consideration received or receivable in respect of the initial sale shall be allocated between the award credits and the other components of the sale. Therefore, the recognition of the C1 000 must be split into two components, namely revenue attributable to the sale of the actual product and the revenue attributable to the awarding of loyalty points.

Revenue relating to the sale of the goods

To recognise an amount of sales revenue, the criteria per IAS 18 for sales transactions must be met:

- The risks and rewards of ownership must pass to the customer. The entity immediately transfers the good to the customer.

- The entity must retain neither managerial involvement usually associated with ownership nor effective control. The purchased goods are transferred to the customer on date of sale and there is no indication that management has any further involvement with the goods.

- The inflow of future economic benefits must be probable. All sales are cash sales and therefore there is no risk that the inflow is not probable.

- The amount of revenue can be reliably measured – The components of the actual sale of the product can be calculated by netting off the calculation of revenue attributable to the loyalty points, from the total revenue of the sale.

- The costs incurred/to be incurred must be reliably measurable. The costs appear to be reliably measurable since the entity uses an efficient standard costing system.

The entity must *recognise* the revenue attributable to the sale of the product since all recognition criteria are met.
The *measurement* of the revenue from the sale of the actual product is calculated as the amount after deducting the revenue from the sale of the points. The revenue from the sale of the points would be measured as follows:

- Number of points x value per point = C1 000 / C10 x C1 = C100

The revenue from the sale of the actual goods is therefore measured as follows:

- Total revenue – revenue from sale of points = C1 000 – C100 = C900.

Revenue attributable to the loyalty points.

IFRIC 13 states that if the entity supplies the awards itself (as in Naty Ltd's case), it must recognise the consideration allocated to award credits as revenue when awards credits are redeemed and it fulfils its obligations to supply awards. The amount of revenue recognised is based on the number of award credits that have been redeemed in exchange for awards, relative to the total number expected to be redeemed.

Solution 4.18 continued …

b) Journal entries for sale in part (a)

	Debit	Credit
30 November 20X8		
Bank	1 000	
Revenue (actual sale of good)		900
Unearned income (loyalty award)		100
Initial recognition of the sale		

Workings

Sale = C1 000
C10 = 1 loyalty point
Therefore C1 000 = 100 loyalty points
Therefore C100 of the sale is attributable to the loyalty award
Therefore C900 of the sale is attributable to the actual sale of the good.

c) Journal entries for 20X8

	Debit	Credit
31 December 20X8		
Unearned income (loyalty award)	50 000	
Revenue (loyalty award)		50 000
Recognition of revenue relating to the loyalty points redeemed		

Workings

C1 000 000 total sales
C10 = 1 loyalty point
Therefore C1 000 000 = 100 000 loyalty points (1 000 000/100)
And 1 loyalty point has a FV of C1
Therefore 100 000 points = C100 000

Total points estimated to be redeemed = 80% = 0.8 x 100 000 = 80 000

Therefore % redeemed in 20X8 = 40 000/80 000 = 50%
Therefore total revenue recognised relating to loyalty points awarded =
0.5 x C100 000 = C50 000

Solution 4.18 continued …

d) Journal entries for 20X9

20X9 Journals	Debit	Credit
31 December 20X9		
Unearned income (loyalty award)	40 000	
Revenue (loyalty award)		40 000
Recognition of revenue relating to the loyalty points redeemed		

Workings

Total points estimated to be redeemed = 90% = 0.9 x 100 000 = 90 000

Therefore % redeemed in 20X9 = 81 000/90 000 = 90% {81 000 = 41 000 + 40 000}
Therefore total revenue recognised relating to loyalty points awarded =
0.9 x C100 000 = C90 000
But C50 000 was recognised in the 20X8 year
Therefore C40 000 should be recognised in the 20X9 year {90 000 – 50 000}

Solution 4.19

All of the above scenario's deal with the sale of goods. From the information provided it is clear to see that the both the criteria of reliably measuring cost (C12 000) and revenue (C15 600) are met. The three scenario's below focus on the *other* criteria.

Customer A

- The customer paid the amount in full and thus the flow of economic benefits is certain.
- The customer also has taken delivery of the goods and *rewards* have transferred to him.
- The issue, which requires special attention here, is the passing of the *risks* of ownership and whether Retail Therapy's management is still involved in the transaction.

IAS 18.16 provides examples of where significant risks may be retained by the entity.
One of the examples listed involves the presence of a warranty provision. IAS 18.17 explains that revenue should be recognised if the risk of ownership is insignificant and that the risk is 'insignificant' if the seller can reliably estimate future returns and recognise a liability for returns based on previous experience.

Retail Therapy should therefore recognise this revenue since:
- A sale has been made with a warranty (being a risk that ownership will be retained), but
- Past experience is available to draw on in order to reliably estimate the warranty provision (therefore this risk of ownership being retained is deemed to be insignificant).

No provision would, however, be recognised in the case of customer A since past experience indicates that this customer never returns goods and that goods are never faulty: therefore no return is expected.

Customer B

- The customer has taken delivery of the goods and thus risks and rewards have been transferred to him, Retail Therapy's management is also no longer involved and no longer has effective control over the goods. Retail Therapy now has a right to receive payment from customer B.

The issue that requires more deliberation is whether or not it is probable that the economic benefits associated with the transaction will flow to Retail Therapy.

As the customer was known to have a criminal record for fraud and no creditworthiness test was done, there is significant uncertainty that the future economic benefits will flow in. This means that:
- No asset may be recognised (the recognition criteria are not met); and
- Revenue may not be recognised (the recognition criteria are not met).

For practical purposes though, a journal entry must be passed in order that a debtor's statement is generated from the accounting system (debtors statements are normally automatically generated from the debtors account and therefore, if we do not debit this account, no statement will be posted to the customer and therefore, would be failing as a business to recover the money owed to it).

The following journal is suggested (the net effect is that the debtors balance in the statement of financial position is nil and revenue is not recognised, thus complying with both the Framework and IAS 18).

Solution 4.19 continued …

	Debit	Credit
Debtors	15 600	
Unrecognisable debtors allowance (-'ve asset)		15 600
Sale to customer B (fraud crime): uncertain inflow of FEBs. Revenue to be recognised when received.		

Customer C

- The customer, at the time of the sale, was expected to fulfil his obligation to pay in full based on the fact that he was a reliable and long standing customer and therefore the flow of economic benefits was reasonably certain.
- The customer had taken delivery of the goods and therefore risks and rewards had been transferred.

It would thus have been appropriate, according to IAS18, to recognise revenue at this stage.

IAS 18.18 states that when an uncertainty arises about the collectibility of an amount already included in revenue, this uncollectible must be recognized as an expense and not an adjustment to revenue.

It is thus clear that the C15 600 owing by this customer must be written off as a bad or doubtful debt expense, depending on the company's assessment of the probability of recoverability. Either one of the following journals would then be appropriate:

	Debit	Credit
Doubtful debt expense	15 600	
Doubtful debts allowance (-'ve asset)		15 600
Customer C has skipped the country and therefore the recoverability is in question		

OR

	Debit	Credit
Bad debt expense	15 600	
Debtors		15 600
Customer C has skipped the country and therefore the recoverability is not expected: balance owing is written-off		